Ministry of Waqfs
The Supreme Council for Islamic Affairs

ISLAM AND SCIENCE
-7-

by
Prof. Dr. M. G. El-Fandy
Head of the Committee of Experts

.... 1413
.... 1993

Under the Supervision of :
Dr. Muhammad Ali Mahgoub

A. R. E.
Ministry of Waqfs
The Supreme Council for Islamic Affairs

ISLAM AND SCIENCE

— 7 —

by
Prof. Dr. M. G. El-Fandy
Head of the Committee of Experts

.... 1413 *Under the Supervision of :*
.... 1993 *Dr. Muhammad Ali Mahgoub*

IN THE NAME OF ALLAH
AL–RAHMAN (THE BENEFICENT)
AL– RAHIM (THE MERCIFUL)

I. MAINLY INTRODUCTORY
(A) PRECIOUSNESS OF ISLAM

The relationship between culture (notably scientific) progress and the teachings (true teachings) of Islam has not yet been well studied and made clear during the last few centuries. However, history tells us that Islam could readily and rapidly spread from the boundaries of India and China westwards to The Atlantic Ocean , and from Southern Europe and Spain southwards to the Sudan and Senegal. Over this vast land areas and for centuries the Islamic world became the educator.

During that time Europe was almost entirely under (Christian Science) teachings. The Message of Islam had mainly to innovate. The true Islamic teachings were followed. Firm relations between Islam as taught by The Holy Qurân and natural science was then established. As a matter of fact, science being the message of Islam (book 1 pp 32 - 33), it is only natural that a great number of the Quranic Verses describe with amazing precision matters pretaining to the universe.

(B) ISLAM PROMOTED A NEW MENTALITY

The Holy Qurân urged Muslims to ponder over the natural phenomena accessible to observation within the universe, which is the Second Book of Allah.
— refer also to book 3 pp 51 - 54 —.

This particular mentality was ndeed accomptished for the first time on earth in man's spiritual history. For example, one reads in The Holy Qurân what means :

1 - Assuredly, in the heavens and the earth are signs for the believers; and in the creation of yourselves and the living beings He disperses on earth are signs to the firm in faith; and in the variation of night and day; and the sustenance which Allah sends down from the sky, whereby he gives life to the earth after its death; and in sending winds in their ways are signs for a people of discernment. Those are the signs of Allah; We rightfully recite them for you; but, say, with what sort of speech beyond that of Allah and his signs they believe!?

(Al - Jathiya - 2 6)—

١ - ﴿ إِنَّ فِي ٱلسَّمَٰوَٰتِ وَٱلْأَرْضِ لَءَايَٰتٍ لِّلْمُؤْمِنِينَ ﴿٣﴾

وَفِي خَلْقِكُمْ وَمَا يَبُثُّ مِن دَآبَّةٍ ءَايَٰتٌ لِّقَوْمٍ يُوقِنُونَ ﴿٤﴾

وَٱخْتِلَٰفِ ٱلَّيْلِ وَٱلنَّهَارِ وَمَآ أَنزَلَ ٱللَّهُ مِنَ ٱلسَّمَآءِ مِن

رِّزْقٍ فَأَحْيَا بِهِ ٱلْأَرْضَ بَعْدَ مَوْتِهَا وَتَصْرِيفِ ٱلرِّيَٰحِ

ءَايَٰتٌ لِّقَوْمٍ يَعْقِلُونَ ۝ تِلْكَ ءَايَٰتُ ٱللَّهِ نَتْلُوهَا عَلَيْكَ بِٱلْحَقِّ ۖ فَبِأَىِّ حَدِيثٍۭ بَعْدَ ٱللَّهِ وَءَايَٰتِهِۦ يُؤْمِنُونَ ۝ ﴾

ـ الجاثية (٢ ـ ٦) ـ

2 - Say go and wander through the earth and thus see how creation began......

— Al - Ankaboot (20) —

٢ ـ ﴿ قُلْ سِيرُوا۟ فِى ٱلْأَرْضِ فَٱنظُرُوا۟ كَيْفَ بَدَأَ ٱلْخَلْقَ ﴾

ـ (العنكبوت ـ ٢٠) ـ

It is well known in geology that the past history of the earth is written in its crest." The language in which this history is written is known as (fossils). In fact, fossils is the term applied for the remains or traces of plants and animals (which lived in the past) and are found in the earth's crust.

It is now also realized that the earth's strata could be identified by organized fossils. In other words, when a sequence of successive types of animal remains has been established by observation, it becomes possible to determine from the fossil contents the relative age of a deposit. Fossils are thus a direct clew to prehistoric times and the key to the beginning of creation on earth as the Quranic verse points out !! - see also book 2 P7.

It is true, however, that still there are many natural phenomena which can be evaluated only by people possessing science, and on top of such natural phenomena are the phenomena in which modern science is concerned. However, The Holy Qurân prescribes to man for the first time in the spiritual history of the human race to ponder over the phe-

nomena in the universe accessible to human senses. Special regards are assured for those whom the knowledge may reach. In this sense The Holy Qurân says what means :

3 - But it (The Holy Qurân) is clear signs in the hearts of those whom the knowledge has reached.....

— Al - Ankaboot (49).

٣ - ﴿ بَلْ هُوَ ءَايَٰتٌۢ بَيِّنَٰتٌ فِى صُدُورِ ٱلَّذِينَ أُوتُوا۟ ٱلْعِلْمَ ﴾

(العنكبوت - ٤٩)

Amazingly enough, the very first verse of The Holy Qurân gave insentive to gain science and to glorify it. It was the signal for the dawn of The Age of Science and a forerunner of giving the study of the physical world its due dignity. The verse says what means :

4 - Read in the name of your Master Who created.

— Al - Alaq ue (1) —.

Refer to book (5) PP 26 - 29 -

٤ - ﴿ ٱقْرَأْ بِٱسْمِ رَبِّكَ ٱلَّذِى خَلَقَ ۝١ ﴾

- العلق (١) -

II ISLAM THE RELIGION OF SCIENCE

(A) — PREFACE

The present series of books concerning Islam and science has been devoted to make it clear that, inspite of the present extraordinary unfavourable status of the Muslim World, yet The Holy Quràn did invite Muslims to observe, ponder over and study Allah's signs in the universe. Evidently, these three items are respectively the proper way to, and the principal concern of, modern science. For example, Allah says what means :

1 - Have you not seen that Allah sends down water (rain) from the sky and leads it through springs in the earth, then He causes to grow therewith plantation of various colours, then it withers and you see it grows yellow, then He makes it dry and crumble away; for sure this is a message of remembrance to mnof understanding.

- Al - Zumar (21) —.

١ ـ ﴿ أَلَمْ تَرَ أَنَّ ٱللَّهَ أَنزَلَ مِنَ ٱلسَّمَآءِ مَآءً فَسَلَكَهُۥ
يَنَٰبِيعَ فِى ٱلْأَرْضِ ثُمَّ يُخْرِجُ بِهِۦ زَرْعًا مُّخْتَلِفًا أَلْوَٰنُهُۥ ثُمَّ
يَهِيجُ فَتَرَىٰهُ مُصْفَرًّا ثُمَّ يَجْعَلُهُۥ حُطَٰمًا ۚ إِنَّ فِى ذَٰلِكَ لَذِكْرَىٰ
لِأُو۟لِى ٱلْأَلْبَٰبِ ﴿٢١﴾ ﴾

2 - Have you not seen that Allah drives along bits of clouds, then joins them together, then makes them into heaps of cumulus, then you will see rain issuing from their inside and He sends down from the sky mountain masses of (cumuto-nimbus) wherein is hail afflicting therewith whom He pleases and turning it away from whom He pleases, the vivid flash of its lightning almost takes away the sight.

— Al - Noor (43) -

٢ ـ ﴿ أَلَمْ تَرَ أَنَّ ٱللَّهَ يُزْجِى سَحَابًا ثُمَّ يُؤَلِّفُ بَيْنَهُۥ ثُمَّ يَجْعَلُهُۥ رُكَامًا فَتَرَى ٱلْوَدْقَ يَخْرُجُ مِنْ خِلَٰلِهِۦ وَيُنَزِّلُ مِنَ ٱلسَّمَآءِ مِن جِبَالٍ فِيهَا مِنۢ بَرَدٍ فَيُصِيبُ بِهِۦ مَن يَشَآءُ وَيَصْرِفُهُۥ عَن مَّن يَشَآءُ ۖ يَكَادُ سَنَا بَرْقِهِۦ يَذْهَبُ بِٱلْأَبْصَٰرِ ﴿٤٣﴾ ﴾

Refer again to book 5 pp 56 - 57; also to book 1 pp 20 - 21 and book 2 pp 32-34. Notice also that thunder-storms are produced by the rapid expansion of the air in which lightning flashes occur. Thunder- storms are rather common natural phenomena which accompany the passage or formation of the cumulo- nimbus clouds exactly as described by the above verse and justified by observation.

B-FURTHER QURANIC VERSES INVITING MAN TO OBSERVE, PONDER OVER AND TO STUDY ALLAH'S SIGNS.

In The Holy Qurân the opening of such verses is usually by expressions such as : surely, assuredly, say, have you not seen... Thus one reads in The Holy Qurân what means :

1 - Surely in the creation of the heavens and the earth and the variation of night and day and in the boats that sail swiftly over the sea thus benefitting people and in the water which Allah sends down from the sky whereby He gives life to the earth after its death and disperses various living creatures and in sending winds in their ways and the clouds compelled between the sky and the earth are signs for a people who are wise.

— Al - Baqara (164) — .

١ ـ ﴿ إِنَّ فِي خَلْقِ ٱلسَّمَٰوَٰتِ وَٱلْأَرْضِ
وَٱخْتِلَٰفِ ٱلَّيْلِ وَٱلنَّهَارِ وَٱلْفُلْكِ ٱلَّتِي تَجْرِي فِي ٱلْبَحْرِ بِمَا
يَنفَعُ ٱلنَّاسَ وَمَآ أَنزَلَ ٱللَّهُ مِنَ ٱلسَّمَآءِ مِن مَّآءٍ فَأَحْيَا بِهِ
ٱلْأَرْضَ بَعْدَ مَوْتِهَا وَبَثَّ فِيهَا مِن كُلِّ دَآبَّةٍ وَتَصْرِيفِ
ٱلرِّيَٰحِ وَٱلسَّحَابِ ٱلْمُسَخَّرِ بَيْنَ ٱلسَّمَآءِ وَٱلْأَرْضِ لَأَيَٰتٍ
لِّقَوْمٍ يَعْقِلُونَ ﴿١٦٤﴾ ﴾

ـ البقرة (١٦٤) ـ

2 -.. say bring forth your proof provided you are right.

— AL - Baquara (111) —

٢ ـ ﴿ قُلْ هَاتُوا بُرْهَانَكُمْ إِن كُنتُمْ صَادِقِينَ ﴿١١١﴾

ـ البقرة (١١١) ـ

3 - and say (asking Allah). O my Master . I beg for increasing my knowledge.

— Taha (114) —.

٣ ـ ﴿ وَقُل رَّبِّ زِدْنِي عِلْمًا ﴿١١٤﴾ ﴾

ـ طه (١١٤)

4 - Have you not seen that Allah sends down water from the sky and then by it We cause the upgrowth of fruits of various types and colour and that of the mountains are tracks white and red of various grades and shades of colour and black intense masses, and of people and beasts and cattle various likewise are the kinds, but of his servants who fear Alla are only those possessed of knowledge, verily Allah is Mighty, All forgiving

— Fatir (27 — 28) —

- فاطر (٢٧ - ٢٨) -

Evidently, the last verse invites man to iniciate by observation (which is the essential and correct procedure in modern science) the branches of science now known as botany, geology and zoology.

5 - Have not you seen that Allah drives along bits of clouds then He joins them together then makes them into heaps of cumulus (C_b) then wilt thou seen rain issuing from their inside and He sends down from the sky mountain masses of cumulus wherein is hail afflicting therewith whom He pleases and turning it away from whom He pleases, the vivid flash of its lightning (whose electric charge is due to hail) almost takes away the sight.

— Al - Noor (43) —.

٥ - ﴿ أَلَمْ تَرَ أَنَّ اللَّهَ يُزْجِي سَحَابًا ثُمَّ يُؤَلِّفُ بَيْنَهُ ثُمَّ يَجْعَلُهُ رُكَامًا
فَتَرَى الْوَدْقَ يَخْرُجُ مِنْ خِلَالِهِ وَيُنَزِّلُ مِنَ السَّمَاءِ مِن
جِبَالٍ فِيهَا مِن بَرَدٍ فَيُصِيبُ بِهِ مَن يَشَاءُ وَيَصْرِفُهُ عَن
مَّن يَشَاءُ يَكَادُ سَنَا بَرْقِهِ يَذْهَبُ بِالْأَبْصَارِ ﴿٤٣﴾ ﴾

- النور (٤٣) -

The amazing brief statements in this verse inviting man to perform direct observations regarding the stages of formation of the so-called cumulo-nimbus (Cb) clouds, the corresponding formation of hail stones from growing ice crystals falling from the tops of the clouds and the recently discovered separation of opposite electric charges accompanying growth and evaporation of hail-stones, are certainly miraculous. — Refer to Book 2 pp 32 - 34 —.

(C) - FURTHER COSMIC VERSES

1 - Have, yet, those who are bent on denying the truth become aware that the heavens and the earth had been (originally) one single entity which We then parted asunder and We made of water every living thing; do not they thus believe?!

— Al- Anbiyaa (30) —

In book 5 pp 64-66 of this series a brief account concerning the origin of the universe is given. All galaxies, including our own (the Milky Way), were then condensed together in an extremely limited space of an inimaginable density. This highly condensed mass suddenly exploded and formed an unlimited number of clouds and dust which with the passage of time developed into galaxies receding under the power of explosion.

Direct observation now, together with theory (Theory of Relativity), show that galaxies are receding and that the universe is expanding. Here again Allah says what means :

2 - With power and will did We construct the heavens (the universe) and indeed We are expanding them.

— Al - Zariyat (47) —.

٢ ـ ﴿ وَٱلسَّمَآءَ بَنَيْنَٰهَا بِأَيْيْدٍ وَإِنَّا لَمُوسِعُونَ ﴾

ـ الذاريات (٤٧) ـ.

— See also book 5 pp 60, 64 - 65.

Again, the only planet in the solar system in which surplus amounts of water exist in the the form of liquid, solid or even vapour,is our earth. More than three quarters of the earth's surface is covered with liquid water (in oceans, seas, lakes, rivers...) and ice (solid water) in the polar caps, tops of high mountains and icebergs. Water-vapour exists in variable amounts in the earth's atmosphere. It is the source of fresh water on earth.— Refer to book 5 pp 55 - 59 —. As regards the amount of water in the earth, The Holy Qurân amazingly says what means :

3 - And We (Allah) sent down water from the sky according to due ineasure and thus we caused it to be preserved in the earth...

— Al - Mouminoon (18) —.

٣ ـ ﴿ وَأَنزَلْنَا مِنَ ٱلسَّمَآءِ مَآءًۢ بِقَدَرٍ فَأَسْكَنَّٰهُ فِى ٱلْأَرْضِ ﴾

ـ المؤمنون (١٨) ـ.

It is a scientific (fact), however, that on the expense of the amount of water which our earth originally acquired according to

measure, that life on it could nourish and flourish.
4 - ...and that whom His will is to leave straying He makes his chest close and constricted as if he has to rise up in the sky......

— Al - Anaam (125) -

٤ ـ ﴿ وَمَن يُرِدْ أَن يُضِلَّهُۥ يَجْعَلْ صَدْرَهُۥ ضَيِّقًا حَرَجًا كَأَنَّمَا يَصَّعَّدُ فِى ٱلسَّمَآءِ ﴾

ـ الانعام (١٢٥) ـ

As said in book 2 p. 10, atmospheric pressures and cousequently oxygen amounts in the air, decrease rapidly with increasing height above the earth's surface. He who rises up in the air without external protection soon feels the need for wider chest and his thest becomes close and constricted.

However, one has to remember that Prophet Muhammad (prayers and peace be up on him) was not a scientist and his people were illiterate, so he would not have been in a position to explain the scientific details behind natural phenomena.

Before Islam there was not a single Holy Book that urged man to seek for science. Refering in such a manner to signs in the physical world was certainly the new mentality introduced by Islam which stimulated many branches of science - briefly described in books 1, 3 and 6 of this series. Numerous Muslim scientists were specialised in the various brauches of science. In astronomy, for example, the second scientifically correct method for measuring the earth's radius was achieved in Bagdad during the time of Al-Maamoon, in the so-called Middle Ages, long before most Muslims rejected the fact that : "Science is the message of Islam for the sake of man's benefit on earth". They argue that Islam is meerely a spiritual message concerning the hereafter"!!

This second scientifically correct measurement was carried out by the Muslim astronomer Thabit Ibn Qurra- book 1 p 33 -. Some time after Thabit, the famous Muslim astronomer Al-Bairouny carried out the third measurement known in history. Al-Bairouny introduced his famous principle, which is nowadays known as "Al-Bairouny Principle". However, the first correct measurement of the earth's radius known in history was achieved by the Egyptian astronomer Eratothsenus in ancient "Alexandria Library".

The first educational establishments in the Muslim world were attatched to mosques. Universities then appeared long before similar establishments appeared in Europe. It was familiar and common practice among the Europeans to go and study in Muslim universities, notably in Spain, where there was no hindrance to scientific research. However, in the interpretation of The Holy Qurân, it must be distinguished between mere theories and established scientific (facts) arrived at by continuous observation.

In the 15th century, the spirit of that time in Europe was essentially concervative, practically the same as the spirit of the majority of Muslims who in the age of (their) degeneration have little chance to grasp sound scientific interpretation of The Holy Qurân. No doubt, as the Islamic writer Dr. Maurice Bucaille says, Muslims limited their attention to what was set up by their permanent thinkers of the past. Such was almost the culture in Europe when Islam appeared. It was cultivated under Christian influence and the permanent reference to some misleading writings of old times.

(D) PROPHETS'S MIRACLES BREAKING DOWN THE LAWS OF NATURE GAVE PLACE TO THE HOLY QURÂN

After the revelation of The holy Qurân as an Eternal Miracle, which invites man to observe and ponder over the phenomena of nature, it was only natural that Prophet Muhammad (pryers and peace be upon him) should not be supported by any of the type of miraches breaking the laws of nature.

Wnen the people of Macca became quite convinced that the Holy Qurân was a new type of miracles, revelating unique message for the human race, they asked The Prophet Muhammad to cast before them the type of miracles which break down the laws of nature.!! In this respect The Holy Qurân says what means :

1 - They say : "We shall not believe in you until you cause a spring to gush forth for us from the land (of Macca).

Or (until) you have a garden of date-Palms and vines and cause rivers to gush forth in their midst carrying abundant water.

Or (until) you cause the sky to fall in pieces, as you supposed, against us.

Or you bring Allah and the angels before us face to face.

Or you have a house adored with ornaments, or you mount a ladder right into heavens. No, we shall not even believe in your mounting until you send down to us a book that we could read. Say : "Glory to my Master! Am I aught but a man, an apostle?"

— Al - Israa (90 - 91 - 92 - 93) -

١ ـ ﴿ وَقَالُوا لَن نُّؤْمِنَ لَكَ حَتَّىٰ تَفْجُرَ لَنَا مِنَ الْأَرْضِ يَنبُوعًا ﴿٩٠﴾ أَوْ تَكُونَ لَكَ جَنَّةٌ مِّن نَّخِيلٍ وَعِنَبٍ فَتُفَجِّرَ الْأَنْهَارَ خِلَالَهَا تَفْجِيرًا ﴿٩١﴾ أَوْ تُسْقِطَ السَّمَاءَ كَمَا زَعَمْتَ عَلَيْنَا كِسَفًا أَوْ تَأْتِيَ بِاللَّهِ وَالْمَلَائِكَةِ قَبِيلًا ﴿٩٢﴾ أَوْ يَكُونَ لَكَ بَيْتٌ مِّن زُخْرُفٍ أَوْ تَرْقَىٰ فِي السَّمَاءِ وَلَن نُّؤْمِنَ لِرُقِيِّكَ حَتَّىٰ تُنَزِّلَ عَلَيْنَا كِتَابًا نَّقْرَؤُهُ ۗ قُلْ سُبْحَانَ رَبِّي هَلْ كُنتُ إِلَّا بَشَرًا رَّسُولًا ﴿٩٣﴾ ﴾

ـ الاسراء (٩٠ ـ ٩١ ـ ٩٢ ـ ٩٣) ـ

2 - . . . but no change will you find in Allah's way (of dealing) : No turning off will you find in Allah's way (of dealing).

— Fatir (43) -.

٢ ـ ﴿ فَلَن تَجِدَ لِسُنَّتِ اللَّهِ تَبْدِيلًا ۖ وَلَن تَجِدَ لِسُنَّتِ اللَّهِ تَحْوِيلًا ﴿٤٣﴾ ﴾

ـ فاطر (٤٣) ـ

The Holy Qurân is thus Allah's message to man's mind and common sense. Observing Allah's signs in the universe is the first step towards attaining scientifie knowledge

(E) SCIENCE IN THE SERVICE OF ISLAM

In Islam, unlike other religions known in human history, the performance of the various aspects of religious rituals has been rather associated by scientific procedures. In this respect, any one who studies Islam can readily realise the following facts :

(a) The outstanding organization of the lunar calendar.
(b) The astronomically well defined times of prayer.

(c) The correct determination (in any place on earth) of the sacred direction of the (Kaaba) in Macca, and (d) The greed of Uniterianity together with the Quranic teachings lead to the fact that science is the message of Islam.

III ISLAM THE RELIGION OF LIFE

(A) - INTRODUCTION

Islam is purely a personal religion. It avoids privileges of priestly leadership of any kind. This individuality of religion is supported by The Holy Qurân which says what means :

He who goes right it is only for the good of himself and he who is ever going astrary, astray is only to himself and no laden soul should bear another's load and We never punish until We have sent an apostle.

— Al - Israa (15) —.

﴿ مَّنِ ٱهْتَدَىٰ فَإِنَّمَا يَهْتَدِى لِنَفْسِهِۦ ۖ وَمَن ضَلَّ فَإِنَّمَا يَضِلُّ عَلَيْهَا ۚ وَلَا تَزِرُ وَازِرَةٌ وِزْرَ أُخْرَىٰ ۗ وَمَا كُنَّا مُعَذِّبِينَ حَتَّىٰ نَبْعَثَ رَسُولًا ﴿١٥﴾ ﴾

ـ الاسراء (١٥) ـ

The five pillars of faith are given in book (4) p.33. These five pillars of Islam are :

(1) Confession of faith, by declaring that there is no god save Allah and that Muhammad is Allah's apostle.

(2) **Regular performance of five prayers with face direted-** towards the Sacred Macca Mosque at five appointed periods during the day : at daybreak, noon, mid- afternoon, after sunset and in the early part of the night. The prayers are announced by a (caller) from the mosque, instead of by ringing bells. The call to each prayer is :

Allah is Most Great. Allah is Most Great. I bear witness that there is no god save Allah. I bear witness that Muhammad is the Apostle of Allah. Come ye to the prayer. Come ye to success. Allah is Most Great. Allah is Most Great. There is no god save Allah.

(3) The third discipline is the giving of alms (zakat), in the form of a regular percentage (usually one fortieth of the annual revenue) to help the poor and the needy in general.

(4) The fourth discipline is the annual fast (keeping Ramadan). It is obligatory for adults in general. This fast ends with a feast.

(5) Finally, the last duty of a Muslim (the fifth duty) is to take a pilgrimage to Macca once in a life time, provided one is able to do so.

Freedom of will is guaranteed in Islam. In this respect, for example, The Holy Quran says what means:

And say : The truth is from your Master : then whosoever will, let him believe and whosoeven will,let him disbelieve.....

— Al - Kahf (29) —

﴿ وَقُلِ ٱلْحَقُّ مِن رَّبِّكُمْ ۖ فَمَن شَآءَ فَلْيُؤْمِن وَمَن شَآءَ فَلْيَكْفُرْ ﴾

ـ الكهف (٢٩) ـ

(B) INDIVIDUAL'S RESPONSIBILITIES

Man should not enjoy absolute freedom. In other wwrds, man's freedom is limited, not only by conditions prevailing in his community, but also by his relation towards Allah. However, Islam approves of limited individual freedom provided one should watch over his own soul and body as follows :

(A) Responsibility towads man himself : In this respect Allah sys, for example, what means :

(1) Then in the long run, evil in the extreme will be the end of those who do evil...

— Al - Room (10) —

١ ـ ﴿ ثُمَّ كَانَ عَـٰقِبَةَ ٱلَّذِينَ أَسَـٰٓـُٔوا۟ ٱلسُّوٓأَىٰٓ ﴾

ـ الروم (١٠) ـ

(2) .... do not hand yourselves over to destruction..

— Al - Baquara (195) —

٢ ـ ﴿ وَلَا تُلْقُوا۟ بِأَيْدِيكُمْ إِلَى ٱلتَّهْلُكَةِ ﴾

ـ البقرة (١٩٥) ـ

(3) And as for him who has feared the greatness of his Master and forbade the soul its caprice verily paradise will be his refuge.

- Al - Naziaat (40) -

٣ ـ ﴿ وَأَمَّا مَنْ خَافَ مَقَامَ رَبِّهِۦ وَنَهَى ٱلنَّفْسَ عَنِ ٱلْهَوَىٰ ﴿٤٠﴾ فَإِنَّ ٱلْجَنَّةَ هِىَ ٱلْمَأْوَىٰ ﴿٤١﴾ ﴾

ـ النازعات (٤٠) ـ

(4) And by the soul and Him Who shaped it. Then He inspired it its way to lewdness and its way to Godfear.

- Al -Shams (7 - 8) –

٤ ـ ﴿ وَنَفْسٍ وَمَا سَوَّىٰهَا ﴿٧﴾ فَأَلْهَمَهَا فُجُورَهَا وَتَقْوَىٰهَا ﴿٨﴾ ﴾

ـ الشمس (٧ ـ ٨) ـ

(5) ... and he who is guided is only guided to his own gain and he who ever goes astray it is only to his own loss....

— Younus (108) -

٥ ـ ﴿ فَمَنِ ٱهْتَدَىٰ فَإِنَّمَا يَهْتَدِى لِنَفْسِهِۦ ۖ وَمَن ضَلَّ فَإِنَّمَا يَضِلُّ عَلَيْهَا ۖ ﴾

ـ يونس (١٠٨) ـ

(B) Responsibility towards man's own family : the serious degeneration of the family bond in The West is clear. In Islam, man's responsibility towards his family comes next to his responsibiity to himself. Allah says what means :

(1) And your Master has decreed you shall not worship any but Him and to be good to parents., whether one, or both of them, attains old age with you, neither say to them "Fie", nor chide them, but (only) speak to them words respectful; and lower to them the wing of humbleness out of mercy and say : My Master have mercy upon them as they raised me up when I was young.

— Al- Israa (23-24) -.

١ - ﴿ وَقَضَىٰ رَبُّكَ أَلَّا تَعْبُدُوٓا۟ إِلَّآ إِيَّاهُ وَبِٱلْوَٰلِدَيْنِ إِحْسَٰنًا إِمَّا يَبْلُغَنَّ عِندَكَ ٱلْكِبَرَ أَحَدُهُمَآ أَوْ كِلَاهُمَا فَلَا تَقُل لَّهُمَآ أُفٍّ وَلَا تَنْهَرْهُمَا وَقُل لَّهُمَا قَوْلًا كَرِيمًا ﴿٢٣﴾ وَٱخْفِضْ لَهُمَا جَنَاحَ ٱلذُّلِّ مِنَ ٱلرَّحْمَةِ وَقُل رَّبِّ ٱرْحَمْهُمَا كَمَا رَبَّيَانِى صَغِيرًا ﴿٢٤﴾ ﴾

- الاسراء (٢٣ - ٢٤) -

(2) Another aspect of family responsibility in Islam is represented by the law of inheritance of property which is expressed in many verses of The Holy Qurân such as that given in book (3) pp 22 - 23.

(C) The individual's responsibility to his society. According to the Islamic teachings, man's foremost duty is to do his work conscientiously because his work contributes to the welfare of his society. Refer also to book (5) pp 23-25 -. Allah says, for example what means :

(1) And say : Work and Allah will see your work, as will His messenger and the believers....

— Al- Tawba (105) -

١ - ﴿ وَقُلِ ٱعْمَلُوا۟ فَسَيَرَى ٱللَّهُ عَمَلَكُمْ وَرَسُولُهُۥ وَٱلْمُؤْمِنُونَ ﴾

- التوبة (١٠٥) -

(2) - ... and help one another in innocence and piety, but not help one another in crime and hostility.....

— Al - Maida (2) -.

٢ ـ ﴿ وَتَعَاوَنُوا۟ عَلَى ٱلْبِرِّ وَٱلتَّقْوَىٰ ۖ وَلَا تَعَاوَنُوا۟ عَلَى ٱلْإِثْمِ وَٱلْعُدْوَٰنِ ۚ ﴾

ـ المائدة (٢) ـ

C - CHARACTERISTICS OF THE ISLAMIC CIVILIZATION

(A) COVERED VAST FIELDS

Islamic civilization developed almost in the seventh century A.C., partially on a substratum composed of the civilizations which generally preceded Islam and mostly on the Quranic teachings which honoured man. Muslims soon became aware of the great heritage of the human race in art, philosophy, science notably astronomy, literature, medicine, architecture and in governmental affairs. It is worth emphacizing, however, that Islamic civilization was not merely a sort of bridge for the preceding civilizations to pass over to the Era of Science. Muslims did correct them and added to them much of their own.

(B) HONOURED MAN

Many Quranic verses honour man in various ways. The following are some selected examples which say what means :

(1) And verily We have honoured the children of Adam and We have carried them by land and by sea and We have provided for them of good things and endowed them beyond many of whom We created.

— Al - Israa (70) -

١ ـ ﴿ وَلَقَدْ كَرَّمْنَا بَنِيٓ ءَادَمَ وَحَمَلْنَٰهُمْ فِى ٱلْبَرِّ وَٱلْبَحْرِ وَرَزَقْنَٰهُم مِّنَ ٱلطَّيِّبَٰتِ وَفَضَّلْنَٰهُمْ عَلَىٰ كَثِيرٍ مِّمَّنْ خَلَقْنَا تَفْضِيلًا ﴿٧٠﴾ ﴾

ـ الاسراء (٧٠) ـ

وَقَبَآئِلَ لِتَعَارَفُوٓاْ إِنَّ أَكْرَمَكُمْ عِندَ ٱللَّهِ أَتْقَىٰكُمْ إِنَّ ٱللَّهَ
عَلِيمٌ خَبِيرٌ ﴿١٣﴾

ـ الحجرات (١٣)

- Refer also to book (2) p. 18.

In Islam, all people are equal. The only distinction is by piety and fear of Allah, as well as by goodness which benefits one's society. Refer also to book 4 pp 35-40.

(B) GUARANTEED THE FREEDOM OF CREED

Islamic principles approve freedom of creed and request standing to reason in all respects and not to force. For example, Allah says what means :

(1) Summon you to the way of your Master with wisdom and kindly warning and argue with them in the kindest manner; verily your Master is best knower of those who stray from His way and He is best Knower of those who have yielded to His guidance.

- Al - Nahl (125)-

١ ـ ﴿ ٱدْعُ إِلَىٰ سَبِيلِ رَبِّكَ بِٱلْحِكْمَةِ وَٱلْمَوْعِظَةِ ٱلْحَسَنَةِ وَجَٰدِلْهُم بِٱلَّتِى هِىَ أَحْسَنُ إِنَّ رَبَّكَ هُوَ أَعْلَمُ بِمَن ضَلَّ عَن سَبِيلِهِۦ وَهُوَ أَعْلَمُ بِٱلْمُهْتَدِينَ ﴿١٢٥﴾ ﴾

ـ (النحل (١٢٥) ـ

(2) Let there be no compulsion in religion; verily the right way has been made distinct from error.....

— Al - Baqara (256) -

٢ ـ ﴿ لَآ إِكْرَاهَ فِى ٱلدِّينِ قَد تَّبَيَّنَ ٱلرُّشْدُ مِنَ ٱلْغَىِّ ﴾

ـ البقرة (٢٥٦) ـ

D - INSPIRED PURPOSES OF DIPLOMACY

It is not fair to claim that diplomacy in Islamic history began with purely religious aims. This is mainly because the call for Islam necessitated that the core of the Islamic countries (Arabia) had to be kept immune from the Roman, the Greek and the Persian influences.

It was natural to establish a unique regime in order to establish the relations of the newly born states with their neighbouring societies. Obviously, the exchange of envoys and the conclusions of the treaties in concern were almost equal to the recognition of the new Muslim states and their extensive boundaries.

Muslim rulers officially and privately encouraged and worked out for culture and enlightenment. This outstanting Muslim aspect was marked by translations into Arabic mainly from Greek and from Persian.

E - HONOURED THE CARDINAL DOCTRINES OF ISLAM

(δ) In the name of humanity man should not be proud, haughty or arrogant. The Holy Qurân says what means :

(1) And walk not in earth exalted. LO! You can neither rend the earth nor can you stretch to the height of the mountains.

— Al-Israa (37)-

١ ـ ﴿ وَلَا تَمْشِ فِى ٱلْأَرْضِ مَرَحًا إِنَّكَ لَن تَخْرِقَ ٱلْأَرْضَ وَلَن تَبْلُغَ ٱلْجِبَالَ طُولًا ﴿٣٧﴾ ﴾

ـ الاسراء (٣٧) ـ

(β) Islam also lays great stress on justice. The Holy Quran says, for example what means :

(1) .... the enmity of a community should not lead you to be unjust; be just, for this is nearer to piety and fear Allah; verily Allah is all cognizant of what you do.

— Al-Maida (8)-

١ ـ ﴿ وَلَا يَجْرِمَنَّكُمْ شَنَـَٔانُ قَوْمٍ عَلَىٰٓ أَلَّا تَعْدِلُوا۟ ۚ ٱعْدِلُوا۟ هُوَ أَقْرَبُ لِلتَّقْوَىٰ ۖ وَٱتَّقُوا۟ ٱللَّهَ ۚ إِنَّ ٱللَّهَ خَبِيرٌۢ بِمَا تَعْمَلُونَ ﴿٨﴾ ﴾

ـ المائدة (٨) ـ

(2) O you who believe! stand out firmly for justice as witnesses to Allah, even as against yourselves, or your parents, or your kin,

and whether it be (against) rich or poor, for Allah can best protect both, thus follow not the lusts (of yourselves) lest you swerve and if you distort justice or decline to do justic verily Allah is well cognizant of what you do.

— Al - Nisaa (135) -.

٢ - ﴿ يَٰٓأَيُّهَا ٱلَّذِينَ ءَامَنُواْ كُونُواْ قَوَّٰمِينَ بِٱلْقِسْطِ شُهَدَآءَ لِلَّهِ وَلَوْ عَلَىٰٓ أَنفُسِكُمْ أَوِ ٱلْوَٰلِدَيْنِ وَٱلْأَقْرَبِينَ ۚ إِن يَكُنْ غَنِيًّا أَوْ فَقِيرًا فَٱللَّهُ أَوْلَىٰ بِهِمَا ۖ فَلَا تَتَّبِعُواْ ٱلْهَوَىٰٓ أَن تَعْدِلُواْ ۚ وَإِن تَلْوُۥٓاْ أَوْ تُعْرِضُواْ فَإِنَّ ٱللَّهَ كَانَ بِمَا تَعْمَلُونَ خَبِيرًا ﴿١٣٥﴾ ﴾

- النساء (١٣٥) -

(IV) INTERPRETATION OF THE HOLY QURAN IN THE LIGHT OF ACCURATE SCIENTIFIC CONCLUSIONS

A- FOREWORD

(Scientific miracle)is an expression which has been recently introduced in interpreting a great number of verses in the Holy Qurân. The author of the present series of books introduced this expression about fourty years ago when he first wrote about (Cosmic Verses in The Holy Qurân) and the reconciliation betwen the meaning of a great number of the Quranic verses and the astronomical and physical issues in the Era of Science.

However, at present the number of contemporary authors who have sought for the reconciliation of the meaning of a great number of the Quranic verses in the light of the scientific issues in the various branches of seience is rapidly increasing.

One should expect that, The Holy Qurân being an eternal miracle, its various issues should not be limited by a particular era or by a certain culture or knowledge. There is no doubt, therefore, that the scientific interpretation of selected verses in the Holy Qurân should be achieved and approved in the Era of Science, but has to be accomplished almost by scientists.

Most of the acceptatble scientific interpretations of the Holy Qurân appeared almost within the last fifty years or so. Nevertheless, the scientific progress of Muslims during the Middle Ages no doubt was enhanced by the revelation of The Holy Qurân. This progress was unfortunatetly hindered under the influence of various internal and extesrnal factors. Allah says what means :

But it is clear signs in the hearts of those who are granted knowledge.

— Al-Ankaboot (49) -.

﴿ بَلْ هُوَ ءَايَٰتٌۢ بَيِّنَٰتٌ فِى صُدُورِ ٱلَّذِينَ أُوتُوا۟ ٱلْعِلْمَ ﴾

ـ العنكبوت (٤٩) ـ

B - THE HOLY QURAN INVITES MAN TO PERCEIVE AND REASON

(α) The Holy Qurân refuses any wrong ideas and not convincing argumentation. For example it says what means :

(1)..... say bring forth your proof provided you are right.

— Al- Baquara (111) -.

١ ـ ﴿ قُلْ هَاتُوا۟ بُرْهَـٰنَكُمْ إِن كُنتُمْ صَـٰدِقِينَ ﴿١١١﴾ ﴾

ـ البقرة (١١١) ـ

(2) verily in the creation of the heavens and of the earth and in the variation of night and day are signs for those of understanding minds.

— al - Imran (190) -.

٢ ـ ﴿ إِنَّ فِى خَلْقِ ٱلسَّمَـٰوَٰتِ وَٱلْأَرْضِ وَٱخْتِلَـٰفِ
ٱلَّيْلِ وَٱلنَّهَارِ لَـَٔايَـٰتٍ لِّأُو۟لِى ٱلْأَلْبَـٰبِ ﴿١٩٠﴾ ﴾

ـ آل عمران (١٩٠) ـ

(β) The Holy Qurân refers to the supremacy of the Qurânic teachings by resembling them to light by saying for example what means :

(3).... He (Allah) will lead them (the non- believers) forth from the depths of darkness into light....

— Al - Baqara (257-.

٣ ـ ﴿ يُخْرِجُهُم مِّنَ ٱلظُّلُمَٰتِ إِلَى ٱلنُّورِ ﴾

ـ البقرة (٢٥٧) ـ

(4) And such are the parables We set for mankind but those who understand them are only those who are granted knowledge.

— Al- Ankaboot (43)-.

٤ ـ ﴿ وَتِلْكَ ٱلْأَمْثَٰلُ نَضْرِبُهَا لِلنَّاسِ وَمَا يَعْقِلُهَآ إِلَّا ٱلْعَٰلِمُونَ ﴿٤٣﴾ ﴾

ـ العنكبوت (٤٣) ـ

(5).... say are those equal,those who know and those who do not know.....?

— Al - Zumar (9) .

٥ ـ ﴿ قُلْ هَلْ يَسْتَوِى ٱلَّذِينَ يَعْلَمُونَ وَٱلَّذِينَ لَا يَعْلَمُونَ ﴾

ـ الزمر (٩) ـ

C - WHY THE COMMENTARIES HAVE DIFFERED?

Within certain limits most of the different commentaries may be right. The Holy Qurân strikes off the particular for the sake of generalization, so that every one can have his share according to his capability whatever the age on earth. This is evident beacuse :

(α) The Holy Qurân fits all the classes of mankind until the last Day :

And We have not sent you but for the entire mankind as bearer of good news and as warner........

— Sabaa (28) -.

١ ـ ﴿ وَمَآ أَرۡسَلۡنَٰكَ إِلَّا كَآفَّةً لِّلنَّاسِ بَشِيرًا وَنَذِيرًا ﴾

ـ سبأ (٢٨) ـ

β) Every one can have his own share and lead the righteons way according to his faith, environment, era and capability :

Allah does not impse upon man more than his capability.....

— Al- Baqara (286)-.

٢ ـ ﴿ لَا يُكَلِّفُ ٱللَّهُ نَفۡسًا إِلَّا وُسۡعَهَا ﴾

ـ البقرة (٢٨٦) ـ

δ) The following are some verses selected to illustrate the fact that The Holy Qurân strikes off the particular for the sake of generalization :

1 - With power and skill did We construct the heavens and indeed We are expanding them.

— Al - Zariyat (47)-

٣ ـ ﴿ وَٱلسَّمَآءَ بَنَيْنَٰهَا بِأَيْيْدٍ وَإِنَّا لَمُوسِعُونَ ﴿٤٧﴾ ﴾

ـ الذاريات (٤٧) ـ

Refer to book 1 p 9.

The Arabic version of this verse can be interpreted in two various ways as follows :

With power and skill did We construct the heavens and indeed We possess more and more.

..... and indeed We are augmenting your range of observation.

This augmentation actually took place from 5 light hours (the diameter of the solar system), to 100,000 light years (the diameter of our galaxy) to millions of light years (other galaxies, and finally to billions of light years (the quasi -stars).

..... and indeed We are expanding it.

The expansion of the universe has been proved by The Theory of Relativity and galaxies have been observed receding!

2 - And We send the winds seeding (the nimbus clouds) thus cause water to descend from the sky therewith providing you with water to drink and you are not the owners of its stores.

— Al- Hijr (22)-.

٤ ـ ﴿ وَأَرْسَلْنَا ٱلرِّيَٰحَ لَوَٰقِحَ فَأَنزَلْنَا مِنَ ٱلسَّمَآءِ

مَآءً فَأَسْقَيْنَٰكُمُوهُ وَمَآ أَنتُمْ لَهُۥ بِخَٰزِنِينَ ﴿٢٢﴾ ﴾

ـ الحجر (٢٢) ـ

This particular interpretation has been recently introduced by the present author- see book I p21- It is worth mentioning, however, that old common interpretation used the expression fertilizing (the plants) instead of seeding (the nimbus clouds). This is because meterology is a new branch of science. In the past, people were not aware of the fact that winds do seed nimbus clouds to give rain. Seeding here means supplying the clouds with the so-called nuclei of condensation and water- vapour by carrying them upward from the earth's surface into the clouds. The nuclei of condensation are small particles of salt or of acids having affinity to water.

(3) The Holy Qurân sometimes iqnores the conclusions of particular issues for a particular reason or another. In such cases the interpreter has to consider factors such as : (a) the conditions and reasons of the revelation of the verses to be interpreted. (b) The overall meaning of the verse should not be changed in a manner that is different from that intnded by it. (c) The same principle should be applied for the manner for which the verse was quoted. (d) The interpretation should be limited to what is being interpreted and must conform to what has been accepted in the Arabic language, science, history.... and guidance of The Propht, prayers and peace be upon him.

In fact, we lack a good deal of wisdom which is obscure to us and which is known to Allah Who says what means :

He is Who has sent down to you The Book, some (verses) of it are verses fundamental (of well- established meaning); they are the foundation of The Book. Others are allegorical. But as regards those whose hearts are perversed they follow the part there of that is allegorical, seeking discord and searching for some hidden meaning. Yet no one knows its hidden meaning axcept Allah and those who are granted firm knowledge. They say : We believe in The Book, the whole of it is from our Master and none will grasp the message except those (men) of understanding. — Al - Imran (7) -

﴿ هُوَ ٱلَّذِىٓ أَنزَلَ عَلَيْكَ ٱلْكِتَٰبَ مِنْهُ ءَايَٰتٌ مُّحْكَمَٰتٌ هُنَّ أُمُّ ٱلْكِتَٰبِ وَأُخَرُ مُتَشَٰبِهَٰتٌ ۖ فَأَمَّا ٱلَّذِينَ فِى قُلُوبِهِمْ زَيْغٌ فَيَتَّبِعُونَ مَا تَشَٰبَهَ مِنْهُ ٱبْتِغَآءَ ٱلْفِتْنَةِ وَٱبْتِغَآءَ تَأْوِيلِهِۦ ۗ وَمَا يَعْلَمُ تَأْوِيلَهُۥٓ إِلَّا ٱللَّهُ ۗ وَٱلرَّٰسِخُونَ فِى ٱلْعِلْمِ يَقُولُونَ ءَامَنَّا بِهِۦ كُلٌّ مِّنْ عِندِ رَبِّنَا ۗ وَمَا يَذَّكَّرُ إِلَّآ أُو۟لُوا۟ ٱلْأَلْبَٰبِ ﴿٧﴾

- آل عمران (٧) -

E- MORE SCIENTIFIC KNOWLEDGE IS MUSLIM'S PRINCIPAL REQUISITE

1. The Holy Qurân sets before science the clues and favours attaining wider and wider scopes. Allah says what means :

And say : O my Master grant me more knowledge.

﴿ وَقُل رَّبِّ زِدْنِي عِلْمًا ﴿١١٤﴾ ﴾

- طه (١١٤) -

Science should concentrate strictly on the study of nature and utilisation of inherent energy and potentialities of matter in the universe,in order to uncover Allah's signs and for the sake of benefitting man. See book 2 pp 26 - 27.

2. Mental reasoning of the Qurânic verses when read or heard is the Muslim's primary requisite. For example Allah says what means :

(a) And thsoe who when they are admonished with the verses (signs) of their Master, drop not down at them, as if they were deaf and blind.

— Al- Furqan (73) -.

﴿ وَالَّذِينَ إِذَا ذُكِّرُوا بِآيَاتِ رَبِّهِمْ لَمْ يَخِرُّوا عَلَيْهَا صُمًّا وَعُمْيَانًا ﴿٧٣﴾ ﴾

- الفرقان (٧٣) -

(b) .... who believe not there is a deafness in their ears and it is blindness in their (eyes)....

- Fussilat (44) -

﴿ وَٱلَّذِينَ لَا يُؤْمِنُونَ فِىٓ ءَاذَانِهِمْ وَقْرٌ وَهُوَ عَلَيْهِمْ عَمًى ﴾

- فصلت (٤٤) -

As we know, children are born deaf and blind. With the passage of some time, the senses of the child begin to develop, but the sense of hearing precedes that of vision, which in turn is followed by the development of the heart senses.

The reason of this regular order of the development of senses is rather difficult to explain, and it is really amazing that The Holy Qurân follows the same sequense in almost all the verses. For example, one reads what means :

(1)…. assuredly, the hearing, the vision and the heart, for all these man is set up responsible.

— Al- Israa (36) -

﴿ إِنَّ ٱلسَّمْعَ وَٱلْبَصَرَ وَٱلْفُؤَادَ كُلُّ أُوْلَٰٓئِكَ كَانَ عَنْهُ مَسْـُٔولًا ﴿٣٦﴾ ﴾

- الاسراء (٣٦) -

(2) …. and We have endowed them with hearing, seeing and heart (intellect) yet of no profit at all unto them were these hearing, seeing and intellect… .

- AL - Ahqaf (26) -

﴿ وَجَعَلْنَا لَهُمْ سَمْعًا

وَأَبْصَٰرًا وَأَفْـِٔدَةً فَمَآ أَغْنَىٰ عَنْهُمْ سَمْعُهُمْ وَلَآ أَبْصَٰرُهُمْ وَلَآ

أَفْـِٔدَتُهُم مِّن شَىْءٍ ﴾

- الاحقاف (٢٦) -

(3) Say it is He who has created you and made for you the faculties of hearing, seeing and intellect. Little thanks give you.

— Al - Mulk (23)-.

﴿ قُلْ هُوَ
الَّذِىٓ أَنشَأَكُمْ وَجَعَلَ لَكُمُ السَّمْعَ وَالْأَبْصَٰرَ وَالْأَفْـِٔدَةَ
قَلِيلًا مَّا تَشْكُرُونَ ﴿٢٣﴾ ﴾

ـ الملك (٢٣) ـ

V - WITH THE HOLY QURAN IN THE UNIVERSE

A - WOMAN'S PREGNANCY STAGES

Since a long time ago, scientists used to believe that a fully created human being had to be present right from the beginning of conception.

Since more than 1400 years ago, however, The Holy Qurân miraculously declared that prenatal human development takes place in various stages.

Those stages were discoverd mainly during the middle of the nineteenth century, after the discovery of the ovum. Before that time scientists used to ignore completely the contribution of the woman in the creation of the embryo.

After thorough study scientists finally became aware of the fact that embryonic development occurred in stages which required accurate descriptions.

Miraculously enough, the terms which describe clearly the internal and the external characteristics of the embryonic development are those used by the Quranic testaments. One can say that The Holy Qurân, in describing the stages of the embryonic develoment, is the most suitable reference!
The Holy Qurân says what means :

And we did create man from an evolutionary quintessence of clay. We then made him a fertilized drop attached firmly to a place of settlement. Then We made of the fertilized drop a leech-like structure, and then We made of the leech-like structure a chewed-like piece of flesh, then we turned the

chewed- like flesh into bones (skeleton), then We clothed the bones with flesh (muscles), and then We caused him to develop and come into being (human)......

→ Al - Muminoon (12 - 14)-

﴿ وَلَقَدْ خَلَقْنَا ٱلْإِنسَٰنَ مِن سُلَٰلَةٍ مِّن طِينٍ ﴿١٢﴾ ثُمَّ جَعَلْنَٰهُ نُطْفَةً فِى قَرَارٍ مَّكِينٍ ﴿١٣﴾ ثُمَّ خَلَقْنَا ٱلنُّطْفَةَ عَلَقَةً فَخَلَقْنَا ٱلْعَلَقَةَ مُضْغَةً فَخَلَقْنَا ٱلْمُضْغَةَ عِظَٰمًا فَكَسَوْنَا ٱلْعِظَٰمَ لَحْمًا ثُمَّ أَنشَأْنَٰهُ خَلْقًا ءَاخَرَ ﴾

- المؤمنون (١٢ - ١٤) -

The above verses include the Quranic terms used in describing the various stages of the development of human beings. These terms are :

(1) Evolutionary quintessence. سلالة
(2) Fertilized drop. نطفة
(3) Place of settlement. قرار مكين
(4) leech- like structure. علقة
(5) Chewed - like piece of flesh. مضغة

B — IS OUR UNIVERSE LIABLE TO VANISH?

Our universe is a universe of galaxies. Each galaxy is built up of matter and radiation. Matter as a term used in physics, is simply any collection of atoms.

An atom consists of electrons and a nucleus. Nuclei consist of protons and neutrons. Obviously, therefore, the first step in deeling with matter is that of describing the electrons and the protons and their arrangement in the atom. Next to this step comes the growing of atoms into molecules of various forms of matter and the properties of bulk matter.

Electrons may be defined as material particles which are extremely small and light with negative electric charge. They revolve in orbits around their nuclei. Nuclei bear positive charges. Protons and neutrons are each 1850 as massive as electrons. The nucleus is, therefore, much heavier than the electrons which may surround it. A proton has an electric charge of the same magnitude as that of the electron but positive instead of negative.

It has been recently discovered that the universe is built up of matter and the so-called anti- matter, which form galaxies well separated from each other. When matter and anti-matter are gathered together both of them vanish as matter while amazing amounts of energy liberate.

Anti-matter was first discovered in the cosmic rays coming from space The abnormal amount of energy radiated by the so-called quasi-stars at remote distances in space is quite possibly the result of meeting of matter with anti-matter galaxies over

there in heavens!- Refer to book 4 p 67 - However, The Holy Qurân says in this respect what means .

Surely Allah upholds the heavens and the earth lest they vanish, no one can uphold them after Him

— Fatir (41) -

﴿ إِنَّ ٱللَّهَ يُمْسِكُ ٱلسَّمَٰوَٰتِ وَٱلْأَرْضَ أَن تَزُولَا ۚ وَلَئِن زَالَتَآ إِنْ أَمْسَكَهُمَا مِنْ أَحَدٍ مِّنۢ بَعْدِهِۦٓ ﴾

ـ فاطر (٤١)

C - PRIORITY OF WATER

Water is a chemical compound composed of oxygen and hydrogen. It consists by volume of one part of oxygen to two parts of hydrogen. In small quantities pure water is colourless and tasteless liquid. In large quantities it has somewhat a bluish tinge.

Its boiling point is 100 °C and it freezes into ice at O °C. Generally it attains its maximum density (1 gram per c c) at 4 °C. This means that ice is lighter than water and floats partialy over its surface. This unique propriy of ice and water differs entirely from the normal rule namely that all material bodies attain their maximum densities (and thus are relatively heavier) when they are in their solid states.

In nature, for example, icebergs are masses of floating ice broken away from a glacier or ice- sheet. One-tenth of the iceberg is usually above the ocean- surface. Arctic bergs have been seen about 100m. high, which means that about 1000m exist below the water sur.ace.

Amazingly enough,although this abnormal behavior of ice in water has not yet been explicity explained, yet this behavior plays the greatest role in favouring life to flourish on earth. This fact can be readily explained as follows :

As icebergs float over the surface of the ocean they become directly exposed to sun rays and thus gradually turn into liquid water. On the other hand, if icebergs sink to the bottom they will remain there as ice and build up such that sooner or later ocean currents no longer exist. But ocean currents carry the greater part of the solar energy gained in the tropics and transfer it to the

middle latitudes and polar regions, thus produce heat-balance in the earth's atmosphere. This heat balance checks the occurrence of fatal temperature maxima and minina on earth.

However, as regards such beneficial unique property of ice in water, one should refer to a Quranic wiseness which says what means :

But His (Allah's) command when He wishes something is to say concerning it : Be and at once it exists.

— Yasin (82) -.

﴿ إِنَّمَآ أَمْرُهُۥٓ إِذَآ أَرَادَ شَيْـًٔا أَن يَقُولَ لَهُۥ كُن فَيَكُونُ ﴿٨٢﴾ ﴾

- يس (٨٢) .

D - LIFE

Life is the particular kind of activity which distinguishes man and living things like animals, plants... from not living things like machines....., but in fact no rigorous definition can be given to life.

Allah, the Creator, alone knows the difference between an alive man and his body a minute afterwards when death has been practicaly instantaneous ! The Holy Qurân says what means :

(1) And they ask you about the spirit (of inspiration). Say : The spirit is my Master's concern and of knowledge it is only a little that is communicated to you (O men).

— Al- Israa (85) -

﴿ وَيَسْـَٔلُونَكَ عَنِ ٱلرُّوحِ قُلِ
ٱلرُّوحُ مِنْ أَمْرِ رَبِّى وَمَآ أُوتِيتُم مِّنَ ٱلْعِلْمِ إِلَّا قَلِيلًا ﴿٨٥﴾ ﴾

- الاسراء (٨٥) -

(2) It is Who (Allah) created death and life in order to render clear who of you have the best deeds..

Al - Mulk (2) -

﴿ ٱلَّذِى خَلَقَ ٱلْمَوْتَ وَٱلْحَيَوٰةَ لِيَبْلُوَكُمْ أَيُّكُمْ أَحْسَنُ عَمَلًا ﴾

(3) and you see the land bare and dead but when We descend on it water it vibrates and flourishes....

— Al - Haj (5) -

﴿ وَتَرَى ٱلْأَرْضَ هَامِدَةً فَإِذَآ أَنزَلْنَا عَلَيْهَا ٱلْمَآءَ ٱهْتَزَّتْ وَرَبَتْ ﴾

- الحج (٥) -

It is true that in organic chemistry the carbon atom is regarded to be the principal atom, but water is esential for life. In the solar system our earth is practically the only planet on which sufficient water exists in its three states the vapour, the liquid and the solid.

Living is not merely a kind of activity consisting of action and reaction between the organism and its environment and directed towards securing either self maintenance or the the continuance of race. At least as regards man, living is geneerally a type of life limited by death. According to Islam for example during this life man is offered full freedom to do evil or otherwise to follow Allah's righteous way.

The tissues of the bodies of living beings(either animals or plants) are made up of a number of very small units called cells. These are the ultimate biological units of structure and functions. The detailed study of the various processes taking place in a body resolves itself into the study of the minute changes taking place in its cells. Water is found to be essential for both animal life and

plant life. 90 per cent of the plant cells is water and about seven upon eight of the animal cells is water. However, one reads in The Holy Qurân a verse which says what means :

Do not the infidels see that the heavens and the earth were joined together as one unit before We split them apart and that We made of water every living thing....?!

— Al - Anbiyaa (30) -

﴿ أَوَلَمْ يَرَ الَّذِينَ كَفَرُوا أَنَّ السَّمَاوَاتِ وَالْأَرْضَ كَانَتَا رَتْقًا فَفَتَقْنَاهُمَا وَجَعَلْنَا مِنَ الْمَاءِ كُلَّ شَيْءٍ حَيٍّ ﴾

- الانبياء (٣٠) -

(see book I P 25 and book 4 PP 60 - 61)

About 75 per cent of the earth's surface is covered by water in order that life on earth can nourish and flourish. In this concern The Holy Qurân says what means :

And We sent down water from heavens according to a precise measure and thereby caused the earth to hold it....

— Al - Mouminoon (18) -

﴿ وَأَنزَلْنَا مِنَ السَّمَاءِ مَاءً بِقَدَرٍ فَأَسْكَنَّاهُ فِي الْأَرْضِ ﴾

- المؤمنون (١٨) -

- See book I P 11 and book 3 p 36 -

E - THE HOLY QURAN : THE BOOK OF THE COSMOS

When referring to the cosmos and creation for example, The Holy Qurân selects words and expressions which in the era of science proved to uncover scientific details in an amazing manner :

(1) For example, referring to the creation of man in the earth, The Holy Qurân says what means.

.... verily (Allah said to the angels) I intend to adopt beings (who worship Me) in the earth.....

— Al - Baqara (30) -

﴿ إِنِّي جَاعِلٌ فِي ٱلْأَرْضِ خَلِيفَةً ﴾

- البقرة (٣٠) -

The expression (in the earth) is actually literal translation word by word and uncovers the fact that a part of the earth rises above our heads to about 1000 kilometers. This part is its atmosphere. Reference in this respect should also be made to book 3 PP 7 - 8 and book 4 P 55. Any differences in interpreting the verse are due to differences in culture and specialization of the interpreters.

(2) Regarding the immensity of the earth's water The Holy Qurân says what means :

And We (Allah) sent down water from heavens according to a precise measure thereby We caused it to dwell in the earth.

— Al- Mouminoon (18) -.

﴿ وَأَنزَلْنَا مِنَ السَّمَاءِ مَاءً بِقَدَرٍ فَأَسْكَنَّاهُ فِي الْأَرْضِ ﴾

- المؤمنون (١٨) -

Refer also to book 2 pp 10 - 11 and book 3 P 36.

Here again, any differences in interpreting the verse are due to differences in culture and specialization of the various interpreters.

(3) A third example is readily provided by the verse which means :

Have you not seen that Allah drives along bits of cloud, then He joins them together then He makes them into cumulus....

— Al - Noor (43) -

﴿ أَلَمْ تَرَ أَنَّ اللَّهَ يُزْجِي سَحَابًا ثُمَّ يُؤَلِّفُ بَيْنَهُ ثُمَّ يَجْعَلُهُ رُكَامًا ﴾

- النور (٤٣) -

The stages of development of a cumulus cloud have been photographed. The development begins by the appearance of bits of small clouds in the sky. Two or more of these small clouds then combine together to form the growing cumulus.

The Holy Qurân is no doubt the first book which gave this precise scientific description! The word (cumulus) indicates accumulation of cloud layers. The same meaning is given by the Quranic word (rucamy)! Reference should also be made to : Book 1 pp 18 - 19, book 2 pp 32 - 34 and book 5 pp 57 - 58.

(4) The reader can readily realize that The Holy Qurân adopts

words and expressions which bear close relation to the nature or behaviour of things. In this respect reference should be made for example to book 2 PP 34 - 36. The verses in concern are Allah's saying what means :

Nay, indeed I could swear by (the heavenly bodies) which remain far from the sight for long periods of time (al-khunnas) and reappear running sweeping (the sky) - Al- jawary al - kunnas -.

- Al Takweer (15 - 16) -

﴿ فَلَآ أُقْسِمُ بِٱلْخُنَّسِ ۝ ٱلْجَوَارِ ٱلْكُنَّسِ ۝ ﴾

- التكوير (١٥ - ١٦) -

Comets, as we know them now, are members of the solar system. They have very long orbits which carry them far from the sun for long periods during which they become invisible, as though they are hiding. The Holy Qurân uses the word (khunnas) which means hiding!

Halley's comet, for example, appeared in 1910 and in 1986 in the twentieth century. In this reapect reference should be made to book 2 pp 34 - 36. On approaching the sun, comets usually acquire very long tails which appear as though they are sweeping the sky (kunnas) while moving with high velocities (jawary).

(5) Allah says what means :

It is He (Allah) Who sends down water (rain) from the sky thereby We produce vegetation of all kinds (plants) from which we produce khadirra (green material of the lcoves or chlorophyl) out of which We produce heeped grains....

— Al - Anaam (99)

﴿ وَهُوَ ٱلَّذِيٓ أَنزَلَ مِنَ ٱلسَّمَآءِ مَآءً فَأَخْرَجْنَا بِهِۦ نَبَاتَ كُلِّ شَيْءٍ فَأَخْرَجْنَا مِنْهُ خَضِرًا نُّخْرِجُ مِنْهُ حَبًّا مُّتَرَاكِبًا ﴾

ـ الأنعام (٩٩) ـ

Obviously, the word khadirra refers to the green colouring matter in almost all plants- refer to book 3 pp 39 - 40 -.

Scientifically, this green colouring matter is called chlorophyl. With the aid of sun- light chlorophyl reacts to produce grains, sugar, oil.... Clearly, therefore, the verse miraculously lays out the principal steps in botany!

(F) ARE THE UNIVERSE'S LIMITS BEYOND HUMAN REACH?

As mentioned in book 3 PP 51 - 56, the universe is, in fact, one of the two books of Allah namely (1) the book which we read and recite its verses (The Holy Qurân) and (2) the Book in which we live and observe its wonders (the universe).

Science is actually the result of observation and exact measurement and description of the different phenomena and things in the universe Due to the vast extension of the universe, it was natural that the question arose Is there real harmony in the structure of the universe, being originally created by one and the same God?

In this respect The Holy Qurân says : what means.

(1) ... no want of proportion will there be in the creation of Al-Rahman (the Beneficent.....

— Al - Mulk (3)-.

١ ـ ﴿ مَا تَرَىٰ فِي خَلْقِ الرَّحْمَٰنِ مِن تَفَاوُتٍ ﴾

ـ الملك (٣) ـ

(2) ...... Sseest thou any flaw?

— Al - Mulk (3) -

٢ ـ ﴿ هَلْ تَرَىٰ مِن فُطُورٍ ﴿٣﴾ ﴾

ـ الملك (٣) ـ

However, scientists nowadays agree that there is clear harmony in the physical and dynamical laws governing the universe. This is readily obvious from Allah's saying what means :

(1) (Allah) is He Who created seven successive heavens; no want of proportion would there be in the creation of Al-Rahman (the beneficent), so turn your vision (anywhere), do you observe any flaw?

— Al - Mulk (3) -

١ - ﴿ ٱلَّذِى خَلَقَ سَبْعَ سَمَٰوَٰتٍ طِبَاقًا ۖ مَّا تَرَىٰ فِى خَلْقِ ٱلرَّحْمَٰنِ مِن تَفَٰوُتٍ ۖ فَٱرْجِعِ ٱلْبَصَرَ هَلْ تَرَىٰ مِن فُطُورٍ ﴿٣﴾ ﴾

- الملك (٣) -

(G) TWO BOUNDS LIMIT OUR OBSERVATIONS

Amazingly enough The Holy Qurân continues to say in verse (4) Al-Mulk what means :

Then turn your vision twice :
Your vision will come back to you dull and discomfited in a state worn- out.

— Al - Mulk (4) -

﴿ ثُمَّ ٱرْجِعِ ٱلْبَصَرَ كَرَّتَيْنِ يَنقَلِبْ إِلَيْكَ ٱلْبَصَرُ خَاسِئًا وَهُوَ حَسِيرٌ ﴿٤﴾ ﴾

- الملك (٤) -

The interpretation of this verse again depends principally on how one understands it. The writer, however, refers the word twiee to the upper and lower limits of the universe, so that the verse declares that by naked eyes man is neither able to observe the finest details of matter or the atoms (the lower limit), nor he is able to see details of the remote outer galaxies (upper limit).

(H) THE ATOM

The atom is the smallest particle of matter which can exist alone or enter into chemical reactions. Atoms are supposed to have diameters of about 10^{-8} cm. A small drop of liquid water may contain ten thousand billion billions of atoms, so that atoms are invisible by the naked eye.

Usually, two or more atoms form a molecule. The earliest idea that matter consists of the so- called atoms originated among the early Greek philosophers more than 3,000 years ago. It was only in The Era of Science that the known (facts) of chemistry could be explained on regarding the atom to be the lower limit of matter. In the twentieth century, however, it became clear that : Atoms consist of nuclei surrocunded by electrons revolving round their nuclei, in a manner almost similar to the rotation of the planets round the sun in the solar system.

The Holy Quran refers to such rotations by saying, for example, what means :

It is not permited to the sun to overtake the moon, nor can the night outstrip the day and each swims along in an orbit.

— Yasin (40)-

﴿ لَا ٱلشَّمْسُ يَنۢبَغِى لَهَآ أَن تُدْرِكَ ٱلْقَمَرَ وَلَا ٱلَّيْلُ سَابِقُ ٱلنَّهَارِ ۚ وَكُلٌّ فِى فَلَكٍ يَسْبَحُونَ ﴿٤٠﴾ ﴾

- يس (٤٠) -

Refer also to book 3 P 45.

The aggregate of all the atoms created constitute the entire universe whose outer limits are beyond man's vision! It is generally accepted however, that the same construction and physical laws apply everywhere in the universe as mentioned before.

Man began to consider the possibility of dividing the atom into smaller constituents only in the twentieth century. For thousands of years before that it was believed that the atom could not be divided. The idea was originally postulated by The Greek philosopbers.

However, amazingly enough, The Holy Qurân, on referring to the atom by the term (Tharrah), declares that the (Tharrah) is divisilbe! scientifically speaking, the word (Tharrah) nowadays speicifically means the atom in Arabic.

One reads in the Holy Qurân what means :

(1)...... from Whom (Allah) is not hidden the least weight of an atom neither in the heaven nor in the earth and neither is there anything less than that nor greater, but is in a Record Perspicous.

— Sabaa (34) -

١ ـ ﴿ لَا يَعْزُبُ عَنْهُ مِثْقَالُ ذَرَّةٍ فِى ٱلسَّمَـٰوَٰتِ وَلَا فِى ٱلْأَرْضِ وَلَآ أَصْغَرُ مِن ذَٰلِكَ وَلَآ أَكْبَرُ إِلَّا فِى كِتَـٰبٍ مُّبِينٍ ﴿٣﴾ ﴾

ـ سبا (٣) ـ

(2)...... and not is hidden from your Master so much as the weight of an atom neither in the earth nor in heaven and neither less than that nor greater but are recorded in a Record Perspicuous.

— Yunus (61) -

٢ ـ ﴿ وَمَا يَعْزُبُ عَن رَّبِّكَ مِن مِّثْقَالِ ذَرَّةٍ فِى ٱلْأَرْضِ وَلَا فِى ٱلسَّمَآءِ وَلَآ أَصْغَرَ مِن ذَٰلِكَ وَلَآ أَكْبَرَ إِلَّا فِى كِتَـٰبٍ مُّبِينٍ ﴿٦١﴾ ﴾

ـ يونس (٦١) ـ

VI.. WE (ALLAH) HAVE NOT MISSED OUT IN THE BOOK ANY THING (OF VALUE)...

— AL - ANAAM (38) -

﴿ مَّا فَرَّطْنَا فِي ٱلْكِتَٰبِ مِن شَيْءٍ ﴾

ـ الأنعام (٣٨) .

(A) FOREWORD

It is generally known that in almost all religions scientists faced great difficulties with the religious authorities of some creeds. Such difficulties rarely, or almost never, occurred in the Muslim world.

The famous trial of the famous astronomer Galileo (1615) is an outstanding example. He was accused as a result of accepting the scientific "facts" declared by Copernicus regarding the earth's rotation, which were regarded by the church as wrong and unacceptable interpretation of The Holy Script (Bible)!

It was only natural that in the long run this attitude urged scientists in Europe to keep away from referring to any religion, and nowadays young scientists who happen to mention God (Allah) in their work have to stand out at once!!

Nothing of the above mentioned sort of accusation occurred in the Muslim countries. The Holy Qurân invites people to cultivate science and knowledge anywhere and thus to observe Allah's signs in the universe.

Unfortunately, the present scientific stagnation in the Islamic world is the result of degeneration of the Islamic civilization due to several external and internal factors including the non-scientific interpretations of most of the Quranic verses dealing with creation. These verses are about 900 in number.

In addition to the the above mentioned verses, there are also other verses which could not be otherwise interpreted up to now. With the advance of science such verses will, however, be moe properly interpreted. Allah says what means :

We shall show them Our portents in the horizons and within themselves until it will be manifested unto them that it (The Holy Qurân) is the truth....

(B) ABOUT THE SERVICES WHICH MOUNTAINS RENDER

The following services are among the several examples which The Holy Qurân mentions in order that man may realise the scientific attitnde of Islam.

It is well known in geology that the earth's crust is forever undergoing changes by factors such as : (a) slipping, (b) isostasy and (c) weathering. This complex of activities is slow in process but cumulative in effect. The factor (c) - weathering - is achieved by running water and by winds which act to transport masses of aterial of the mountains downward into lower levels (valleys and oceans) and thus produce instability in the solid crust.

MOUNTAINS AS PEGS

Allah says what means :

Have we not made the earth (like) a vast expance. And the mountains as pegs.

— Al - Nabaa (6 - 7) -

﴿ أَلَمْ نَجْعَلِ الْأَرْضَ مِهَادًا ﴿٦﴾ وَالْجِبَالَ أَوْتَادًا ﴿٧﴾ ﴾

- النبأ (٦ - ٧) -

From the geological point of view it has been concluded that the earth's solid crust has an average thickness of more thaw 60 Kilometers. The actual thickness beneath high mountain bents is generally double its value beneath the vast continental areas. This is because high mountains have ots extending to about

60 - 70 kilometers below the earth's surface across the various layers of the solid crust. Obviously, therefore, these roots check the slipping of the different layers forming the solid crust one over the other, thus acting like pegs !!

A peg is no more than a long piece of timber (or metal) driven into the ground in order to hold the ropes used for keeping a tent upright and stable against wrapping and slipping by wind and the like.

ISOSTASY

Allah says what means :

1 - And He (Allah) has cast into the ground (high) mountains standing firm lest it (the earth's crust) should shake with you......

— Al - Nahl (15) -

١ ـ ﴿ وَأَلْقَىٰ فِى ٱلْأَرْضِ رَوَٰسِىَ أَن تَمِيدَ بِكُمْ ﴾

- النحل (١٥) -

(2) And We have set in the earth high mountains standing firm lest it should shake with them......

— Al Anbiyaa (31) -

٢ ـ ﴿ وَجَعَلْنَا فِى ٱلْأَرْضِ رَوَٰسِىَ أَن تَمِيدَ بِهِمْ ﴾

- الانبياء (٣١) -

I sostasy is the concept that large lighter masses of the rocks of the crust float over denser material below, so that pressure could be evenly distributed. In this sense Allah also says what means :

(3) And the mountains (Allah) has fixed them firmly (arsaha) like anchored ships!!

— Al - Naziyat (32) -

٣ ـ ﴿ وَالْجِبَالَ أَرْسَاهَا ﴿٣٢﴾ ﴾

ـ النازعات (٣٢) ـ

— MOUNTAINS AS WATER RESOURCES

Climatologically, mountains and table- lands are known to receive the greater part of precipitation on earth. Moreover, in winter high mountain tops become covered with ice which melts in summer: For such reasons mountains and table- lands form the main sources of the water supplied by rivers and tributaries.

Allah says what means :

And He (Allah) has cast into the ground high mountains standing firm lest it (the earth's crust) should shake with you and rivers and ways that you may follow the righteous way.

- Al - Nahl (15) -

- النحل (١٥) -

(C) THE TWO NATURAL TYPES OF CLOUDS AND THEIR FORMATION

In meteorology, clouds are divided into two principal types namely stratus clouds and cumulus clouds.

According to cloud physics- or even by direct photography- it has been made clear that the mode of formation and development of one type differs from that of the other type. Thus, the first type- the stratus clouds- forms by a moist air current which ascends gradually into a single layer or stratum in the atmosphere to form a single sheet- or seperate sheets- within the stratum and hence the name stratus clouds. Miraculously enough The Holy Qurân says what menas :

Allah is He Who sends forth the winds so they raise clouds then does He spread them in strata in the sky as He pleases......

— Al - Room (48) -.

١ ـ ﴿ ٱللَّهُ ٱلَّذِى يُرْسِلُ

ٱلرِّيَـٰحَ فَتُثِيرُ سَحَابًا فَيَبْسُطُهُۥ فِى ٱلسَّمَآءِ كَيْفَ يَشَآءُ ﴾

ـ الروم (٤٨) ـ .

See book 5 PP 56 - 57.

The second type is called cumulus clouds. A cumulus cloud is formed by the appearance in the sky of several small cells of clouds. Sooner or later, every two or more cells combine together

to form the growing cumulus, which develop and accumulate vertically to great heights (10 - 15) kilometers. Hence the name cumulus clouds. Again, amazingly enough The Holy Qurân says regarding the formatin of cumulus clouds what means :

Have you not seen that Allah drives along bits of clouds then joins them together, then makes them into heaps of cumulus.......

— AL - Noor (43) -.

٢ ـ ﴿ أَلَمْ تَرَ أَنَّ ٱللَّهَ يُزْجِي سَحَابًا ثُمَّ يُؤَلِّفُ بَيْنَهُۥ ثُمَّ يَجْعَلُهُۥ رُكَامًا ﴾

ـ النور (٤٣) ـ

See Book 5 p. 57.

The ultimate growth of a cloud yields the rainy cloud. Rainy clouds in general are called nimbus clouds. Thus we have either nimbo-stratus (Ns) clouds, or cumulonimbus clouds (Cb). However The Holy Qurân says what means :

(3) Have you seen the water which you drink ? Have you made it fall from the nimbus clouds, or is it We Who send it down?

— Al - Waquiat (68 - 69).-

٣ ـ ﴿ أَفَرَءَيْتُمُ ٱلْمَآءَ ٱلَّذِى تَشْرَبُونَ ۝٦٨

ءَأَنتُمْ أَنزَلْتُمُوهُ مِنَ ٱلْمُزْنِ أَمْ نَحْنُ ٱلْمُنزِلُونَ ۝٦٩ ﴾

ـ الواقعة (٦٨ ـ ٦٩) ـ

It has been only lately established in meteorology that nimbus clouds are the result of the growth of clouds vertically upward under favourable atmospheric conditions. Nevertheless, long before the development of meteorology as science during the last century or so, The Holy Qurân remains to say what means :

(1) Allah is He Who sends forth the winds so they raise clouds then does He spread hem in strata in the sky as He pleases and He makes them partially thick so that you see the rain coming from inside them......

— Al - Room (48) -

٣ - ﴿ ٱللَّهُ ٱلَّذِي يُرْسِلُ ٱلرِّيَٰحَ فَتُثِيرُ سَحَابًا فَيَبْسُطُهُۥ فِي ٱلسَّمَآءِ كَيْفَ يَشَآءُ وَيَجْعَلُهُۥ كِسَفًا فَتَرَى ٱلْوَدْقَ يَخْرُجُ مِنْ خِلَٰلِهِۦ ﴾

- الروم (٤٨) -

(2) Have you not seen that Allah drives along bits of clouds then joins them together, then makes them into heaps of cumulus then you will see rain issuing from their inside......

— Al - Noor (43) -

٤ - ﴿ أَلَمْ تَرَ أَنَّ ٱللَّهَ يُزْجِي سَحَابًا ثُمَّ يُؤَلِّفُ بَيْنَهُۥ ثُمَّ يَجْعَلُهُۥ رُكَامًا فَتَرَى ٱلْوَدْقَ يَخْرُجُ مِنْ خِلَٰلِهِۦ ﴾

- النور (٤٣) -

(D) THE HONEY BEE AND ITS ACTIVITY

Honey bees form colonies in which highly developed organization exists for the purpose of building the home, collecting and storing food and rearing the next generation.

The hive bees are a good example.

The innate of the hive consists of three classes :

(a) The queen bee. This is the only fertile female and is responsible for the continued existence of the community. It can be distinguished by its greater size short wings and the absence of the wax pockets and pollen baskets of the workers.

(b) The males. These are the drones. Their function is only to fertilize the queen. They live upon the honey provided by the workers.

(c) The workers. These constitute the bulk of the community. Upon them devolve all the work in the hive.

Generally, while the queen servives for three seasons, the workers have average age of six weeks only.

The nectar from the flowers is collected by means of tube- like prolongation of the lower lip and is passed into the honey bag, where it undergoes a process of partial digestion and is thus converted into honey, ready to be thrown up and stored in the cells of the honey comb.

When a colony of bees has been placed in a new hive wax is secreted in little white discs in the wax pockets and is then spread in a layer on the roof to form the foundation of the comb which is built downwards.

Bees play an inportant role in the fertilization of flowers and are thus of value to farmers and gardeners.

In the past bees used to dwell in colonies in mountain caves, on trees and in people's habitations. Man, however, then kept them in dome - shaped straw. Nowadays, standard wooden hives are made. These hives are covered with perforated pieces of zinc in which are placed square sections to contain combs that serve for storage of honey only.

Briefly, honey is a semi-fluid substance produced by the honey bee which obtains as raw material the nectar of flowers, carrying it in the honey crops, where it is acted upon by a ferment which modifies its character. When the crop is full, the bee returns back to its hive and regurgitates the contents. The honey is stored in the waxen cells of the comb prepared for this purpose.

Honey consists chiefly of levulose and dextrose. The former being the fluid portion. Its flavour and colour depend greatly upon the flowers that have been visited.

Honey is a highly nutritive food. Four-fifths of its content are carbohydrates; the rest includes protein - valuable antiseptic and mineral salts. It is the only form of sugar that does not have to be refined. Amazingly enough, The Holy Qurân says about honey bees and honey what means :

1 - And your Master revealed to the bees to acquire dwellings in the mountains and in the trees and in people's habitations; then to eat of all the produce (of plants) thus follow the pathes of their Master as rendered ready for them. There issues from within their bellies (of the honey bags) syrup of varying colours wherein is healing for people : Verily in this is a sign for men who give thought.

— Al - Nahl (68 - 69) -

١ ـ ﴿ وَأَوْحَىٰ رَبُّكَ إِلَى ٱلنَّحْلِ أَنِ ٱتَّخِذِى مِنَ
ٱلْجِبَالِ بُيُوتًا وَمِنَ ٱلشَّجَرِ وَمِمَّا يَعْرِشُونَ ﴿٦٨﴾ ثُمَّ كُلِى مِن
كُلِّ ٱلثَّمَرَٰتِ فَٱسْلُكِى سُبُلَ رَبِّكِ ذُلُلًا ۚ يَخْرُجُ مِنۢ بُطُونِهَا
شَرَابٌ مُّخْتَلِفٌ أَلْوَٰنُهُۥ فِيهِ شِفَآءٌ لِّلنَّاسِ ۗ إِنَّ فِى ذَٰلِكَ
لَـَٔايَةً لِّقَوْمٍ يَتَفَكَّرُونَ ﴿٦٩﴾

ـ النحل (٦٨ ـ ٦٩) ـ

VII – PEOPLE OF THE BOOK

1 - Like the Muslims, the Jewish and the Christian people had their own Holy Scripts. The revelation of The Holy Qurân in the seventh century of the Christian era was readily acceptable to followers of the original Books and they became absorbed by Islam. In this concern, The Holy Qurân says what means :

(1) And likewise We have sent down to you the Book (The Holy Qurân); so the people to whom We offered the Book (the Jews and Christians) believe therein and of these (The Arabs) some believe therein; and none but the infidels reject Our signs.

— Al - ankaboot (47) -

١ - ﴿ وَكَذَٰلِكَ أَنزَلْنَآ إِلَيْكَ ٱلْكِتَٰبَ ۚ فَٱلَّذِينَ ءَاتَيْنَٰهُمُ ٱلْكِتَٰبَ يُؤْمِنُونَ بِهِۦ ۖ وَمِنْ هَٰٓؤُلَآءِ مَن يُؤْمِنُ بِهِۦ ۚ وَمَا يَجْحَدُ بِـَٔايَٰتِنَآ إِلَّا ٱلْكَٰفِرُونَ ﴿٤٧﴾ ﴾

ـ العنكبوت (٤٧) ـ

In fact, Islam is the truth that all the original inspired Books teach. It matches with humanity demands, scientific conclusions and spiritual happiness, away from tales, fairy-tales and fallacies. As quoted in book 4, pp 3 - 4, The Holy Qurân has no doubt retained its purity without the least change up to now. However, Allah says what means :

Say we believe in Allah and in what has been revealed to us and what was revieled to Abraham, Ismail, Isaac, Jacob and the Tribes and in what was given to Moses, Jesus and the Prophets (the Books) from their Master. We make no distinction between one another amongst them and unto Him (Allah) we bow our will in Islam. If any one follows a religion other than Islam (submission to Allah) never will it be accepted of him and in the Hereafter he will be in the ranks of the losers.

— Aal - Imran (84 - 85) -.

٢ ـ ﴿ قُلْ ءَامَنَّا بِٱللَّهِ

وَمَآ أُنزِلَ عَلَيْنَا وَمَآ أُنزِلَ عَلَىٰٓ إِبْرَٰهِيمَ وَإِسْمَٰعِيلَ وَإِسْحَٰقَ

وَيَعْقُوبَ وَٱلْأَسْبَاطِ وَمَآ أُوتِىَ مُوسَىٰ وَعِيسَىٰ وَٱلنَّبِيُّونَ

مِن رَّبِّهِمْ لَا نُفَرِّقُ بَيْنَ أَحَدٍ مِّنْهُمْ وَنَحْنُ لَهُۥ مُسْلِمُونَ ﴿٨٤﴾

وَمَن يَبْتَغِ غَيْرَ ٱلْإِسْلَٰمِ دِينًا فَلَن يُقْبَلَ مِنْهُ وَهُوَ فِى ٱلْءَاخِرَةِ

مِنَ ٱلْخَٰسِرِينَ ﴿٨٥﴾ ﴾

ـ آل عمران (٨٤ ـ ٨٥) ـ

(2) Concerning the deviations introdced, for one reason or another, into the original (true) revelations The Holy Qurân says what means :

(1) Verily this Qurân does explain to the Children of Israel most of the matters in which they disagree.

— Al - Naml (76) -

- النمل (٧٦) -

(2) And to you We have sent down the Book (Qurân) in truth confirming the Scriptures already between your hands and guarding them in safety, so judge amongst them by what Allah has revealed and follow not their vain desires diverging from the Truth that has come to you

- Al - Maidah (48) -

- المائدة (٤٨) -

(3) And assuredly there is amongst them (people of the Book) a group who distort the Book with their tongues that you would think it is a part of the Book, but it is not part of the Book, and they say "That is from Allah" but it is not from Allah, they tell against Allah, but they well know it

— Al - Imran (78) -

﴿ وَإِنَّ مِنْهُمْ لَفَرِيقًا يَلْوُونَ أَلْسِنَتَهُم بِالْكِتَابِ لِتَحْسَبُوهُ مِنَ الْكِتَابِ وَمَا هُوَ مِنَ الْكِتَابِ وَيَقُولُونَ هُوَ مِنْ عِندِ اللَّهِ وَمَا هُوَ مِنْ عِندِ اللَّهِ وَيَقُولُونَ عَلَى اللَّهِ الْكَذِبَ وَهُمْ يَعْلَمُونَ ﴿٧٨﴾ ﴾

- آل عمران (٧٨) -

However, contrary to the majority of Muslims who follow and respect the teachings of The Holy Qurân, the majority of Christians in The West regarded many accounts of the Bible, which may be very elementary, not agreable with their advanced knowledge.

Dr. Maurice Bucaille wrote :

In the Old Testament and in the Gospels there are many contradictions, improbabilities and incompatibilities !!

One can readily see in the present series of Books the amazing agreement between The Holy Qurân and Science. Those who see Muhammad (prayers and peace be upon him) as mere author of The Holy Qurân are quite untenable.

3 - From the first moment anyone embraces Islam (the noble message of universal fraternization) his races, colour and nationality sink into insignificance before the vast conception of humanity and equality for which Islam opens his mind. Thus, one reads in The Holy Qurân what means :

a) O mankind : We created you from a single (pair) of male and female and made you into nations and tribes that you may know each other, indeed the most honoured of you in the sight of Allah

is the most righteous; for sure Allah is all knowing and all reckoning

— Al - Hujurat (13) -

﴿ يَا أَيُّهَا النَّاسُ إِنَّا خَلَقْنَاكُم مِّن ذَكَرٍ وَأُنثَىٰ وَجَعَلْنَاكُمْ شُعُوبًا وَقَبَائِلَ لِتَعَارَفُوا ۚ إِنَّ أَكْرَمَكُمْ عِندَ اللَّهِ أَتْقَاكُمْ ۚ إِنَّ اللَّهَ عَلِيمٌ خَبِيرٌ ﴿١٣﴾ ﴾

- الحجرات (١٣) -

Refer to book 4 p.7.

As mentioned in Book 4 PP 11 - 12 contrary to what appears to occur by some fanatics in their effort to advocate Islam, Muslim advocates used to act in complete compliance with Allah's words which means :

b - Summon you to the way of your Master with wisdom and with proper advice and argue them in the kindest manner; indeed your Master best knows those who stray from His way and He best knows those who have yielded to His guidance.

— Al - Nahl (125) -

﴿ ادْعُ إِلَىٰ سَبِيلِ رَبِّكَ بِالْحِكْمَةِ وَالْمَوْعِظَةِ الْحَسَنَةِ ۖ وَجَادِلْهُم بِالَّتِي هِيَ أَحْسَنُ ۚ إِنَّ رَبَّكَ هُوَ أَعْلَمُ بِمَن ضَلَّ عَن سَبِيلِهِ ۖ وَهُوَ أَعْلَمُ بِالْمُهْتَدِينَ ﴿١٢٥﴾ ﴾

- النحل (١٢٥) -

Islam as a religion is distinguished from other religions by an outstanding characteristic quality established by the Quranic verse which sayas what means :

(c) - Verily the worst of beasts in Allah's sight are the deaf the dumb who have no sense.

— - Al - Anfal (22) -.

﴿ إِنَّ شَرَّ ٱلدَّوَآبِّ عِندَ ٱللَّهِ ٱلصُّمُّ ٱلْبُكْمُ ٱلَّذِينَ لَا يَعْقِلُونَ ﴿٢٢﴾ ﴾

- (٢٢) الانفال -

4 - In conclusion, Islam is a logical and natural development of all Allah's revelations given in earlier ages. There existed amongst The Arabs, as history tells us, Christians and even Jews who, not only did welcome Islam, but also they did become Muslims :

Allah say what means :

Verily among men you find that those of utmost enmity to the believers are the Jews and the pagans; and verily you find the most friendly to the believers are those who say : "We are Christians." This is because among them there are men devoted to learning (by the Monastic Orders) and men who have renounced the world and they are not arrogant. And when they listen to (The Qurân) that has been sent down to the apostle, you see their eyes overflowing with tears as they recognize the truth; they say : "Our Master we have believed so write us down among the witnesses (Muslims). What reason we have not to believe in Allah and the truth which has come to us (The Qurân) seeing that we long for our master to admit us to the company of the righteous."

— Al - Maidah (82 - 84) -.

وَلَتَجِدَنَّ أَقْرَبَهُم مَّوَدَّةً لِّلَّذِينَ ءَامَنُوا۟ ٱلَّذِينَ قَالُوٓا۟ إِنَّا نَصَـٰرَىٰ ۚ
ذَٰلِكَ بِأَنَّ مِنْهُمْ قِسِّيسِينَ وَرُهْبَانًا وَأَنَّهُمْ لَا يَسْتَكْبِرُونَ ﴿٨٢﴾
وَإِذَا سَمِعُوا۟ مَآ أُنزِلَ إِلَى ٱلرَّسُولِ تَرَىٰٓ أَعْيُنَهُمْ تَفِيضُ مِنَ
ٱلدَّمْعِ مِمَّا عَرَفُوا۟ مِنَ ٱلْحَقِّ ۖ يَقُولُونَ رَبَّنَآ ءَامَنَّا فَٱكْتُبْنَا
مَعَ ٱلشَّـٰهِدِينَ ﴿٨٣﴾ وَمَا لَنَا لَا نُؤْمِنُ بِٱللَّهِ وَمَا جَآءَنَا مِنَ
ٱلْحَقِّ وَنَطْمَعُ أَن يُدْخِلَنَا رَبُّنَا مَعَ ٱلْقَوْمِ ٱلصَّـٰلِحِينَ ﴿٨٤﴾

- المائدة (٨٢ - ٨٤) -

5 - As mentioned in book 4 PP 3 - 4, the original text of The Holy Qurân is still preserved entirely in every respect of its original language word by word. Records and order of the revelation of The Holy Qurân were so faithfully made such that as time marches on one can say and report with precision the actual place and time of revelation of each verse. For such reasons it is known everywhere that The Holy Qurân has retained its purity without the least change up to now.

The language of the Book is the living Arabic. This is generally not the case with regard to old and extinct languages. Further more, there is no fear of mixing The Holy Qurân (Allah's words) with any human interpertation, or even with the Prophet's own words (Traditions).

In this sense Allah says what means :

Lo ! We, even We, revealed Al -Zikr (The Holy Qurân) and verily We are its Guardian.

— Al - Hijr (9) -.

﴿ إِنَّا نَحْنُ نَزَّلْنَا ٱلذِّكْرَ وَإِنَّا لَهُۥ لَحَـٰفِظُونَ ﴿٩﴾ ﴾

ـ الحجر (٩) ـ

No translation, however, into English or any other language can do justice to the magnificent Arabic poetic style of The Holy Qurân, and Allah says what means :

And so We have revealed to you Arabic Qurân......

— Al - Shura (7) -

﴿ وَكَذَٰلِكَ أَوْحَيْنَآ إِلَيْكَ قُرْءَانًا عَرَبِيًّا ﴾

ـ الشورى (٧) ـ

CONTENTS